

# Data Distribution Committee

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DESI Science Workshop





- The DESI Construction Project will provide a limited set of basic data access tools.
  DESI-doc-908
- The DESI Collaboration provides the rest.
- The DDC exists to identify what needs to be provided.
  - Our Charge in full





What Are We Doing Right Now?



- Speaking to you, of course.
- Collect Use Cases.
- Convert Use Cases into Requirements.
- Write a Report.
- Issue RFPs as needed.
- Think about data release policy.





## **Use Case: Spectrum Quality**



- I want to access/analyze a DESI spectrum.
  - View pipeline summary statistics and fitted spectrum.
  - View simple Q & A measures.
  - Account for a large dynamic range of spectral types, wavelength coverage, and S/N.
  - Keep up-to-date with most recent data and reductions ("last night").





# **Use Case: Intelligent Software**



- I want to run science code that knows about DESI data.
  - "I don't want to hunt for files."
  - Importable library that knows how to obtain the data.
  - Be able to recreate the data structure locally at various levels of completeness.
  - No (or small) difference when running code locally or at NERSC.





## **Use Case: Backtracking Data**



- I want to view the all the data for a spectrum/target/brick.
- Connect target DB to imaging and spectrum DBs.
  - Easy!
- Connect target **files** to imaging and spectrum **files**.
  - Not quite so easy! This requires careful thought.
- Pass row numbers in tables? 2015-11-04 DESI Science Workshop



# **Use Case: Backtracking Bricks**



- I have an arbitrary RA, Dec and need to find the corresponding brick name.
- In theory, this involves formatting the RA, Dec properly, if one also knows the brick size.
- Will brick size be finalized? Who decides that? If not, how does someone find the current brick size?





- The use cases get converted into requirements on interfaces.
- Many existing examples from other projects, but would be nice to have more.
- Core library  $\rightarrow$  API  $\rightarrow$  WebApp.





#### **Data Release Policy**



- Internal data releases eventually become external.
- Lag between pipeline results and cataloglevel results (*e.g.* LSS catalogs).
  - Maybe releases can be phased to take this into account.





#### **Links and Documents**



#### • DDC on <u>Trac</u>.

- The raw text for the <u>DataDistDoc</u> Report.
- View the draft Report at <u>DESI-doc-1048</u>.







- We still want to hear about use cases and interfaces from other projects.
  - If only there were some DES people who also happened to work for DESI...
- If you have questions email desidata@desi.lbl.gov.



